Draft Protocol for the removal of Ammonium Nitrate (AN) in damaged rail car on the West Fertilizer property.

A rail car containing approximately 100 tons of agricultural grade AN was damaged and tipped over during the explosion that occurred on April 17, 2013 at the West Fertilizer facility located in West, Texas.

The rail car is located on the property just north and west of the crater formed by the explosion and cannot be accessed for reclamation and removal without crossing the apparent area of origin from the east. However, the car can be approached with the necessary equipment from the south along the west side of the property but this will require that the south sector of the site be cleared of material and equipment that is deemed non-contributory to the event per the Phase 1 protocol that was released, through Mr. John McCoys office on May 22, 2013.

On Wednesday May, 22,2013 agents of the Federal Alcohol, Tobacco and Firearms (ATF) agency allowed an expert in the manufacture and handling of AN onto the site to visually inspect the subject material. This inspection revealed the following:

- The physical characteristics of the AN in the rail car are consistent with agricultural grade material as listed on the bill of lading.
- Material which spilled out of the car has been mixed with organic debris such as wood scraps, paper and seed. This contamination poses little threat of destabilizing the AN to the point of making it unsafe.
- No evidence of destabilizing hydrocarbon contamination was observed.
- The AN cannot be ignited by sparks. The only risk identified was the possibility that a spark from a passing train could ignite the plastic tarps currently covering the spilled material and rail car. These tarps will be removed and replaced with fire resistant material until such time that the rail car can be accessed from the south.

Upon completion of the protocol for clearing the south sector, the site shall remain closed to all but essential personal and the following protocol will be implemented. The removal process will be videotaped using multiple cameras and posted on a website that can accessed by the interested parties.

- 1. Initiate a site safety plan that includes provisions to douse the car and material with water in the event of any unforeseen hazard.
- 2. The debris piles along the rail spur which contain soil excavated from the explosion crater and chunks of concrete on the west side of the site will be cleared to give access to the rail car from the south. It is our intention to landfill this material unless there is an objection from interested parties.
- 3. The tarp material covering the rail car shall be removed.
- 4. Three samples of the material will be collected from the car. One sample will be sent to the manufacturer of the AN for their records and the other two will be retained by Crane

- Engineering for any future analysis. It is our suggestion that any analysis of the material be done by a mutually agreed upon independent lab and the cost be shared by the interested parties.
- 5. The AN on the ground shall be hand shoveled into clean 55 gallon steel drums that have been tare weighed. The lids shall be installed with the bungs left open. This material shall be disposed of per the instructions of the Office of the Texas State Chemist' There is a layer of material in the car that has some debris mixed in with it. This layer will be raked out and disposed of with the material recovered from the ground in the previous step.
- 6. The drums will be weighed and their gross weight will be recorded.
- 7. A tare weight will be obtained for a clean vacuum truck.
- 8. The material remaining in the rail car will be accessed from the open tops of the rail car or through the hopper gates on the bottom of the car. This material is in good condition and will be reclaimed by its owner and reissued to the market per the instructions of the Office of the Texas State Chemist. If a significant amount of material is left in the car after and entry into the car by personnel is required a confined space entry protocol will be initiated. Once the truck is full it will be weighed. It may involve several iterations of this step to empty the car completely.
- 9. Once the car is empty it will be washed down with water from a fire hose to neutralize and remove as much of the residual AN as possible. A tanker truck with a suction pump will be used to collect the water from the rinsing process. This water shall be disposed of per the instructions of the Texas Commission on Environmental Quality (TCEQ).
- 10. Removal of the car may require that it be torch cut into smaller pieces. This could be a time consuming and potentially hazardous process. With this understanding the car will be left in place until such time it can be removed in coordination with the car's owner and Union Pacific (UP) railroad.

This protocol is subject to change upon agreement of the interested parties.